

An Overview of the Pedagogical Integration of ICTs in Schools in South Africa

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The mood...

“e-Education ... and the implementation of the National Curriculum Statement ... have both revolutionised and completely reconfigured the South African education landscape....

“the imminent ubiquitous use of ICT to support teaching and learning in South African state schools....

“the research and development community [must now] devise innovative solutions in respect of the setting up of technology platforms, technology solutions and technology infrastructure for the support of teaching and learning.”

(KwaZulu-Natal Department of Education, 2006)



The policy...

White Paper on e-Education (2004):

“Every South African manager, administrator, teacher and learner in general and further education and training will be ICT capable by 2013”

Goals:

- ICT professional development
- Electronic content resources
- Infrastructure
- Broadband connectivity
- Community engagement
- Research, monitoring and evaluation

Content resources:

National Education Portal

www.thutong.org.za

National policy guidelines on professional development:

- Basic ICT competencies
- Integration of ICT into teaching and learning
- Specialization and innovation in ICT in education

The implementers...

Nine provincial governments:

The SA constitution specifies that the national government determines policy, but provincial governments interpret and implement that policy.

Currently, only one province (Western Cape) has a focused programme for teacher development in ICT integration into teaching and learning. Other provinces focus on computer literacy, or limited emerging programmes on ICT integration.

Only two provinces have developed a technical support system to support teachers professionally (Western Cape & Gauteng)

ICTs in South African Schools (2005)	Total no. schools	% with computers – admin.	% with computers - teaching & learning
South Africa	25582	51%	23%
Gauteng	1897	94%	79%
Western Cape	1454	97%	77%
Northern Cape	422	91%	60%
North West	2025	68%	30%
Free State	1842	77%	26%
Mpumalanga	1863	53%	16%
KwaZulu-Natal	5653	44%	12%
Limpopo	4187	42%	9%
Eastern Cape	6239	23%	8%

Some partners ...

- Microsoft *Partners in Learning*
- Intel *Teach to the Future*
- Comptia (technical support to teachers)
- Tshwane University of Technology
(technical and management support to schools)
 - largely donor funded
 - small scale

The turn to research...

White Paper on e-Education (2004):

“There is sufficient empirical evidence that investments in ICTs yield positive results for learners and teachers....improved inventive thinking skills ... communication ... interpersonal skills ... productivity ...”
...

But

- Not clear what this research is.
- In particular, not clear what the research is, in Africa and in South Africa, that leads to this conclusion.

The research...

From 1990 – 2005, well over 200 higher degrees awarded by South African universities related to the study of ICTs in education:

- approx.50% from 1990-2000, 50% from 2001-2005
- approx.80% at 5 universities – Pretoria, Johannesburg, Witwatersrand (all Gauteng) Cape Town, Stellenbosch (both Western Cape)
- Approx 50% on management of ICTs in education; 50% related to pedagogical use.

The research on ICTs and pedagogy...

80%		20%		
evaluation	monitoring	research on teaching & learning processes		
impact studies	policy research	virtual communities of practice	peer-group learning around computers	individual learning processes
e.g. quasi-experimental studies e.g. case studies e.g. illuminative evaluation	e.g. review of best practice e.g. comparative research	e.g. ethnography	e.g. discourse analysis	e.g. modeling “mind-machine” relations

Directions ...

More careful research required on the teaching and learning dimension:

- pedagogic use of ICTs in schools
- distinctive, even unique, learning demands of (South) Africa, given its diversity of access to education, learning histories, language backgrounds, geographic and schooling contexts, etc.
- strengthening of terms of evaluation and monitoring research.

Thank you!
Merci a tous!